#### THE

# URBAN DISTRICT COUNCIL

OF

## GREAT CROSBY



# ANNUAL REPORTS

OF THE

## MEDICAL OFFICER OF HEALTH

AND

SANITARY INSPECTOR,

FOR THE YEAR 1915.

#### Liverpool:

PRINTED BY THOMAS BRAKELI LIMITED,



GREAT CROSBY URBAN DISTRICT COUNCIL, 1915.

## SUMMARY.

	Area of Distr	rict in acre	s (as	correct	ed)	• •	• •		1,867	
	Population (1	1901 Censu	s)	• •			• •	• •	7,555	
	Population (1	1911 ;;	)	• •	• •		• •	• •	12,274	
			•							
Birth	Rate	• • •	• •	• •	• •	• •	• •	• •	• •	19.73
Death	Rate of Resid	dents (occu	rring	in Dist	rict)	• •	• •	• •	• •	7.45
		Per 100	o of t	the <b>es</b> ti	mated	l popul	ation.			
	Death Rate	of Infants,	under	ı year	per	1,000 H	Births		67.41	
	Death Rate	(of Resid <b>e</b> r	ats in	and or	at of	the Dis	strict)		8.99	
	Zymotic Dea	th Rate	• •	• •	• •	• •	• •	• •	0.36	
RAINF	ALL—									
R	ainfall for the	past year	• •	• •	• •	• •	• •	28.15	inche	s
Т	he average rai being.		-	_		rs (1876		29.69	, ,	
Темрі	ERATURE									
Т	he m <b>ea</b> n temp	perature du	ring t	he year	• •	• •	489	3 degr	ees Fal	ı.
Rate	<b>e</b> able Value,	£89.126	Rate	3/8 in	£	No. of	Occupio	ed Ho	1ses. 2.1	887.
	,			, 0/0 111		1.0.02	- coupi		, 2,	

(The estimated population, January, 1915, was 13,781.)

## ANNUAL REPORT

OF THE

# MEDICAL OFFICER OF HEALTH

FOR 1915.

THE CHAIRMAN AND MEMBERS OF THE

GREAT CROSBY URBAN DISTRICT COUNCIL.

GENTLEMEN,

Owing to the circumstances of the times—the shortage of labour and the necessity of economising the use of paper—it is your wish, as well as that of the Local Government Board, that the Annual Report should only contain as concise and as short an account as possible of the sanitary condition of this district during the year 1915. It will accordingly be drafted on these instructions.

I feel that it is only right that I should bring to your notice the amount of extra work, care and attention that your Sanitary Inspector has given to the sanitary arrangements at the various billets. In addition to this work, he has had on many occasions to give advice to the Military Camps in the neighbourhood with regard to the proper disinfection of the huts and the disposal of infected material.

Your Sanitary Staff has all through the year worked in a most ungrudging and cheerful manner every day in the week, Sundays included, flushing the drains of the houses occupied by the soldiers. For them there has been no respite from this very necessary work.

## Food and Drugs Act.

The different shops in the district from which supplies of tinned foods, bacon, sausages, butter, cakes, fish, etc., were being sent to the several camps and billets, were visited at the request of the Local Government Board, to see that the articles so supplied were wholesome, and that the premises were in a clean state. Instructions and suggestions were given on several points, especially with regard to the protection of butter, sugar, etc., from infection by flies.

## Sewerage and Drainage.

The work and attention given to the sewers and drains has been of the same character as formerly, but I am certain that they have not received the same amount of flushing and dragging as they have been in the habit of getting in past years. In a flat district, such as this, this work ought not to be curtailed.

## Excrement Disposal.

The excremental matter in this district is conveyed to the sea by the "Water Carriage System," through gravitating sewers flushed by water obtained from the Liverpool Corporation.

## Scavenging.

The Council's staff carry out all the necessary scavenging, main roads being cleansed daily, and all others twice weekly, an arrangement of work which gives complete satisfaction.

#### Nuisances.

All complaints of nuisances from foul smells, arising from any source, whenever received, have had immediate attention, and subsequent investigation as to the cause of these nuisances has been carefully made by myself and the Sanitary Inspector, and, wherever necessary, the requisite Notices have been served.

## Public Elementary Schools.

The health of the children attending these Schools has, on the whole, been good until towards the end of the year, when it was necessary to close the Infant Department of the Halsall Girls' School from the 8th of December, and the Senior Department from the 13th of December until the conclusion of the Christmas holiday, on account of the prevalence of measles. The School was, in consequence of this outbreak, thoroughly fumigated and cleansed:

The other Schools received the usual and regular fumigation and cleansing when closed during the various holidays.

The drains have been flushed and treated with disinfectants, as they required attention.

## Infectious Diseases and Hospital Accommodation.

Notifications and disinfections have received the same close attention during the year as in past years. The Hospital arrangements with the Liverpool Corporation remain as heretofore.

The following table gives the number of patients removed to and treated in the Infectious Hospital for the past fifteen years:—

Census pop 1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	Census pop.	1912	1913	1914	1915
7	17	16	10	10	6	16	13	25	II	ΙΙ	32	28	39	65*

<sup>\*</sup> Scariet Feyer 53, and Diphtheria 12=65.

The average number of cases treated in Hospital for the past fifteen years is 20.4.

Table of all cases of Infectious Disease notified to me during the year, together with their localities, age, etc.

уба	ιι, ι	ogemer	** 1		·	, ugo, o	
· ·				No. of Cases Notified.	Deaths.	No. sent to Hospital.	Age of Patients.
SCARLET FE	VEF	<b>?</b>					
Alexandra Road				2			6 years, 18 mos.
Bellion's Court		• • •	* *			1	6 years
Bridge Road			• •	-		I	14 years
Brighton Road	• • •		• •		• • •	8	$\begin{bmatrix} 2, 2, 3\frac{1}{2}, 4, 4, 5, \end{bmatrix}$
Digition Road	• • •		• • •	9	• • •		6, 6, 23 years
Brown Moor Lane				I			8 years
Blundellsands Road			• • •			2	18 and 23 years
Burbo Bank Road			• • •	-	* * *	ī	38 years
Cavendish Road			• • •		• • •	_	9 and 11 years
Century Road		* * *	• • •		• • •	2	6 and 11 years
College Road	• • •	• • •	• • •				
	• • •	• • •	• • •		• • •	• • •	12 and 13 years
College Road North		• • •	• • •		• • •	• • •	10 years
College Avenue	• • •	• • •	• • •			•••	5 and 13 years
Coronation Road		• • •	• • •		* * *	5	2, 3, 5, 6, 7 yrs.
Coronation Drive	• • •	• • •	• • •	3	• • •	• • •	18 mos., 5 and
To dbott I ama							$6\frac{1}{2}$ years
Endbutt Lane	• • •	• • •	• • •	2	• • •	Ι	5 and 7 years
Elton Avenue	• • •		• • •	I	• • •	•••	40 years
Fairholme Road			• • •	3	• • •	• • •	$3\frac{1}{2}$ , 5, 37 years
Grosvenor Avenue	* * *	• • •		4	•••	I	3 6, 8, 8 years
Islington	• • •	• • •		3		2	5, 11, 19 years
Kilnyard Road	• • •	• • •	• • •	2	•••	I	4 and 23 years
Kimberley Drive	• • •		• • •	Ι	• • •	• • •	19 years
Kingsway	• • •		• • •	3	• • •	•••	8, 9, 12 years
King's Road	• • •	• • •	• • •	7		4	3, 3, 4, 4, 5, 6,
T :							and 7 years
Liverpool Road	• • •	• • •	• • •	I	• • •	Ι	$5\frac{1}{2}$ years
Lune Street	• • •	• • •	• • •	3	• • •	3	5. 6, 10 years
Merrilocks Road	• • •	• • •	• • •	I	• • •		II years
Musker Street	• • •	• • •		3	• • •	3	11, 13, 16 years
Moor Lane	• • •	* * *		I	• • •	• • •	7 years
Moor Park	• • •			I		• • •	12 years
Moorgate Street		• • •		I	• • •	• • •	12 years
Queen's Road				2	o • 19	2	7 and 14 years
Richmond Terrace	• • •			2		2	5 and 9 years
Rossett Road				I		I	II years
St. Luke's Road		• • •		2		2	6 and 5 years
Vale Road	• • •	• • •		6		6	2, 2, 6, 6, 9 and
T7: 1							12 years
Victoria Road		• • •		I		• • •	4 years
York Road		• • •		3		3	6, 12 and 13 yrs.
York Avenue		• • •		ī		•••	$5\frac{1}{2}$ years
Woodville Avenue	• • •	• • •		2	• • •	• • •	10 and 12 years
Windsor Road				2	• • •	I	5 and 6 years
Windy Knowe Hosp	oital	(soldiers)	• • •	2		•••	21 and 27 years
		,			-		7 7
Total		• • •		95	• • •	53	

7

## Table of Notified Infectious Diseases-Continued.

				No. of Cases Notified.	Deaths.	No. sent to Hospital.	Age of Patients
DIPHTHERIA-	_						
Abbotsford Road				I		• • •	2 years
Alexandra Road	• • •	• • •		r		• • •	3 years
Brown Moor Lane				1	I	I	*12 years
Cambridge Avenue	• • •	• • •		I	• • •	r	36 years
Century Road				I	I	r	$*4\frac{1}{2}$ years
Cooks Road	• • •			r		r	$3\frac{1}{2}$ years
Kilnyard Road				r	• • •	r	4 years
King's Road				• • •	• • •	r	3 years
Myer's Road E				r	• • •		4 years
Queen's Road		• • •		r	• • •		10 years
Regent Road				I	• • •	ı	7 years
Shaftesbury Road		• • •		r	I	r	*11 years
St. Anthony's Road				r	• • •		13 years
Victoria Road	• • •	• • •		2	• • •	2	4 and 7 years
Windsor Road	• • •			r	I	r	*4 years
York Avenue				r	• • •	r	21 years
							J
Total	• • •		• • •	16	4	12	
ENTERIC FEV	VER-			,			
Coronation Road				т .			58 years
	• • •	• • •	• • •	I	• • •	• • •	
Kingsway Manor Road	• • •	• • •	• • •	I	• • •	* * *	34 years
	• • •	• • •	* * * *	I	• • •	• • •	16 years
Serpentine S	···	'aaldiana		I	• • •	• • •	32 years
Windy Knowe Hosp	mai (	sormers	· · · ·	3	* * *	* • •	18, 19, 22 years
Total	* * •		• • •	7	• • •	• • •	
ERYSIPELAS—							
Brighton Road	ren			2	• • •		12 and 65 years
College Road	• • •	• • •	• • •	ī	•••		14 years
Ince Avenue		• • •	• • •	r	• • •		56 years
Kilnyard Road	• • •	• • •	• • •	r	• • •		49 years
77.	• • •	• • •	• • •	r	* * *		32 years
Kingsway Liverpool Road (Na	zarot	h House	۰۰۰	I	• • •		54 years
Manor Road				I	• • •	• • •	46 years
Merrilocks Road	• • •	• • •	• • •	I		• • •	56 years
Rosedale Avenue	• • •		• • •	I		• • •	34 years
Roscuale Avenue	• • •	• • •	• • •	1	• • •	•••	54 years
Total	• • •	• • •	• • •	10	• • •	• • •	
OPHTHALMIA N	FON	ATODII	М				
York Road	EOM	JIUNU		I	• • •		ı day
	• • •	• • •	• • •				

<sup>\*</sup> Died.

### Diphtheria.

Two more cases of this disease were reported this year than last year, but three of the notified cases occurred among soldiers. so that the total for the civil population is one less than in 1914.

I would wish still strongly to impress upon parents and guardians the duty of seeing that their children thoroughly cleanse their mouths and throats twice daily with an antiseptic lotion. Children should also, during the short, dark, damp and cold days, be kept away from badly ventilated places of entertainment

#### Scarlet Fever.

This illness, prevalent all through 1914, and increasing towards the end of that year, became more marked in the present year. The number of notified cases rose from fifty last year to ninety-five this year. The character of the disease was mild, no death resulting from its onset. In many instances the infection was contracted out of the district. There was one interesting case of a boy twelve years of age, who had an attack of scarlet fever twice in the year, one attack in March, and the other in November. In all, he has had three attacks of this malady.

#### Enteric Fever.

Seven notifications of this disease were received. All the cases notified were males, four of whom were soldiers, two marine engineers and one a commercial traveller. In each case it was clear that the infection had been acquired out of this district.

#### Measles.

Towards the end of the year this complaint began to increase with great rapidity, necessitating the closure of the Halsall Girls' School. A circular was received from the Local Government Board that this trouble was to be made compulsorily notifiable on the 1st of January, 1916.

## Notification of Births Act (Extension).

This Act came into operation on 1st of September, 1915, and the instructions associated with it have been carried out.

## Health and Sanitary Condition of the District.

The health of the district during this year has not been of such an excellent character as that of last year. Infectious troubles were more numerous, but, fortunately, were not of a very severe type. The residents have been exposed to more risk of infection from outside sources, from the numerous visits of the friends and relations of the soldiers from all parts of the country, and from the arrival of men and letters, etc., from the front.

The infantile mortality is one less than last year, while the average death-rate is .73 less than that of last year. In the early part of the year the weather was very damp and cold. During the year there were marked extremes of cold and heat.

#### Birth Rate.

The number of births registered in the district during the year were 142 males and 128 females, the total being 270, giving a birth rate of 19.73 per 1,000.

### Birth Rate for the past year is 19.73.

Pensus pop. 1901	1903	1904	1905	1906	1907	1908	1909	1910	Census pop. 1911	1912	1913	1914	1915
21*44		_						-	20.20	19 04	20 42	20.04	19.73

#### Infantile Death Rate.

The number of deaths of infants per 1,000 births registered is one less than last year, viz:—19, giving a death rate of 71.16.

#### General Death Rate.

The deaths registered of residents in and out of the district, and belonging thereto, is 123 (63 males and 60 females), showing a death rate of 8.99 per 1,000 of the estimated population.

			Deaths	Registe	red in th	nis Distri	ct only.			
Census pop. 1901	1902	1903	1904	1905	1906	1911	1912	1913	1914	1915
12.22	_	_	_	_		9.13	11.69	7.66	8.25	7.45

	Deaths Registered in and out of District.											
1907	1908	1909	1910	Census pop.	1912	1913	1914	1915				
				10.83	13.19	9.16	9.72	8.99				

Vital Statistics of Whole District during 1915 and Previous Years. TABLE I.

			 					,
5 TO	At all Ages.	Rate.	09.8	10.83	13.16	91.6	6.45	8.99
BELONGING STRICT.	At all	Number.	123	133	170	122	132	123
NETT DEATHS BELONGING TO THE DISTRICT.	Under 1 Year of Age	Number. 1,000 Nett Births.	113.35	16.24	85.36	73.52	73.53	71.16
NET	Under 1 Y	Number.	28	21	21	20	20	19
TRANSFERABLE Deaths.	of Resi-	dents not registered in the District.	20	27	26	31	30	28
TRANSF	of Non-	residents registered in the District	7	9	7	II	10	∞
TOTAL DEATHS	DISTRICT.	Rate.	7.34	6.12	69.11	99.4	8.25	7.45
TOTAL	Dist	Number.	105	112	151	102	112	102
	Nett.	Rate.	17.27	20.50	19.04	20.42	20.04	19.73
Віктнѕ	Ž	Number.	247	248	246	272	272	270
		Un- corrected Number.	:	12.274	12.916	13.314	13 568	13,678
	Population estimated	to middle of each year.	14,300	12,274	12,916	13,314	13,568	13,678
	Vessi	- 23	0161	1161	1912	1913	1914	1915

AT CENSUS OF 1911.—Total Population at all ages 12,274. Number of inhabited houses 2.570. Average number of persons per house 4.56. Area of District in acres (land and inland water) 1,867. Institutions within the District receiving sick and infirm persons from outside the District— Nazareth House, Liverpool Road, Great Crosby. Institutions outside the District receiving sick and infirm persons from the district—Hatherley House, Waterloo; Liverpool Institutions; Bootle Institutions.

Is the Union Workhouse within the District? No:

TABLE II.—Cases of Infectious Disease notified during the Year 1915.

-				-								
		Deaths in Hospital of Patients from this District.	•	r	•	н	٠	•	•	•	•	4
		Total Cases removed to Hospital	•	12	•	53		•	•	•	•	65
UCT		65 and upwards	•	•	н	•	•	•	•	•		H
E DISTRICT	Years.	45 to 65	:	•	2	•	н	•	•	3	•	6
IN WHOLE	At Ages—V	25 to 45.	•	H	23	4	8	•	•	9	H	91
NOTIFIED I	A	15 to 25.	•	H	•	8	4	•	•	4	4	21
CASES NOT		5 to 15.	:	9	7	64	•	•	•	•	Ī	73
CA		I to 5.	•	∞	•	61	•	•	•	7	•	29
		Under 1.	•	•	•	•	•	•	н	•	H	6
		Atall		91	10	95	7	•	H	15	7	151
	NOTIFIABLE	DISEASE	Small Pox	Diphtheria (including	Erysipelas	Scarlet Fever	Enteric Fever	Puerperal Fever	Ophthalmia Ne- onatorum		Tuberculosis	Totals151

ISOLATION HOSPITAL: Liverpool Corporation Infectious Hospital. SANATORIA: None provided at present.

# TABLE III. Causes of, and Ages at, Death during 1915.

All causes { Certified (c) Uncertified   Unc	9 I 4	nder	I and under 2  4  I I I I I	2 and under 5	s of "Re ond the sond	sidents "District.  15 and under 25  6 I	25 and under 45  16 1 3	27 1  45 and under 65	65 and up-wards.  34 I	Total Deaths, whether of Resi.
All causes { Certified (c) Uncertified    Enteric Fever	9 I 4 · · · · · · · · · · · · · · · · · ·	year 1	under 2  4 I I I I I	under 5	under 15 8 I	under 25 6	under 45  16  1  4 3	under 65  27 1 4	up-wards.  34 I	Total whether $\infty$ dents or dents.
Enteric Fever Small Pox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition	4 · · · · · · · · · · · · · · · · · · ·			··· ·· · · · · · · · · · · · · · · · ·	I I		1    4 	1	I	8 · · · · · · · · · · · · · · · · · · ·
Small Pox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	2 2				I I I I I		4		I	· · · · · · · · · · · · · · · · · · ·
Small Pox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	2 2 1 4 3				I	I	4	4	I	· · · · · · · · · · · · · · · · · · ·
Measles Scarlet Fever Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhœa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	2	I		 2   I	I	I	4 3	4	I	· · · · · · · · · · · · · · · · · · ·
Scarlet Fever Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	1 4 3		I	. 2	I	I	4 3	4	I	  
Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition	4		I	 I 	2 I 	I	4	4	I	 
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Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition	3 · · · · · · · · · · · · · · · · · · ·		I	 I 	I	I	4	4	I	
Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	2		I				3	• •	I  	I
Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	2		I			• •	3	• •	· · · · · · · · · · · · · · · · · · ·	I 
Tuberculosis) Tuberculous Meningitis. Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhœa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	8		I	I  	· · · · · · · · · · · · · · · · · · ·	• •	3	• •	· · · · · · · · · · · · · · · · · · ·	
Tuberculous Meningitis Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition	8		I	I  	· · · · · · · · · · · · · · · · · · ·	• •	3	• •	· · · · · · · · · · · · · · · · · · ·	• •
Other tub'culous diseases Cancer, malignant disease Rheumatic Fever Meningitis Organic Heart Disease. Bronchitis Pneumonia (all forms) Other Diseases of the Respiratory Organs Diarrhæa and Enteritis. Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever. Other accidents and diseases of Pregnancy and Parturition	8		I I	• •	ı. I	• •	3	• •	··	• •
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Other Diseases of the Respiratory Organs Diarrhœa and Enteritis Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition			• •		• •		• •	3	6	
Diarrhœa and Enteritis  Appendicitis and  Typhlitis  Cirrhosis of Liver  Alcoholism  Nephritis and  Bright's Disease  Puerperal Fever  Other accidents and diseases of Pregnancy and Parturition		2	• •	I	I	I	2	3	I	2
Diarrhœa and Enteritis  Appendicitis and  Typhlitis  Cirrhosis of Liver  Alcoholism  Nephritis and  Bright's Disease  Puerperal Fever  Other accidents and diseases of Pregnancy and Parturition	2 .	• •	• •		• •	• •		I	I	• •
Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition	2	I	• •	• •	• •	• •	I	• •	• •	• •
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Bright's Disease Puerperal Fever Other accidents and diseases of Pregnancy and Parturition	•	• •	• •	• •	• •			• •	• •	• •
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Other accidents and diseases of Pregnancy and Parturition	·						- •			
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Congenital Debility and										
Malformation (includ-										
ing Premature Birth	8	8								I
Violent Deaths		0	• •	• •		• •	• •	• •	• •	
/ * * * * * * * * * * * * * * * * * * *				т		ı	I	I		
Cuicidos	4   •	•		,	• •	*		1		
Other Defined Diseases 2	1	2	• •	• •		• •	• •		15	2
Diseases ill-defined	0	2	• •	• •	• •	• •	2	7	15	
		1			т.					
or unknown	4		• •	• •	I		2	• •	I	
All causes 12				5	9	6	17	28	35	

TABLE IV. Infantile Mortality During the Year 1915.

Deaths from stated Causes in Weeks and Months under One Year of Age.

Cause of Death	Under 1 week	I-2 weeks	2-3 weeks	3-4 weeks	Total under r month	I-3 months	3-6 morths	6-9 months	9-12 months	Total Deaths under ryear.
All Causes. Certified Uncertified	3		• • •	2	6	6	2	3	2	19 
Small-pox Chicken-pox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Erysipelas Tuberculous Meningitis Abdominal Tuberculosis Other Tuberculous Diseases Meningitis (not Tuberculous) Convulsions Laryngitis Bronchitis Pneumonia (all forms) Diarrhœa Enteritis Gastritis Syphilis Rickets Suffocation, overlying Injury at Birth Atelectasis Congenital Malformations Premature Birth Atrophy, Debility and Marasmus Other causes		I		I	       	I I I I I I I I I I I I I I I I I I I		    	I I	I I
	3	I	•••	2	6	6	2	3	2	19
NETT BIRTHS IN THE YEAR—  Legitimate 263 270  Illegimate 7 270  NETT DEATHS IN THE YEAR OF  Legitimate Infants 18 19  Illegitimate Infants										

## Summary of Medical Officer's Report for 1915.

- What is the character of the Hospital Accommodation?—For Small-pox—As many beds as required. For other Infectious Diseases—As many beds as required.
  - Is it Joint or otherwise?—Joint by Agreement with the Liverpool Corporation, at a fee of two guineas per week per head
  - Number of Beds available for your District?—For Small-pox— As many as required. For other Infectious Diseases—As many as required.
  - Deaths in Hospital of patients removed from your District? From what causes?—Three, from Diphtheria.
- How is Disinfection carried out? Number of Houses disinfected?—
  130. Method?—Sulphur Fumigation. Are Houses disinfected after Phthisis?—Yes. Apparatus used for Clothing, Bedding, etc. (steam or otherwise)?—Dry Heat. Where is apparatus situated?—In Council's Storeyard.
- If Apparatus at a Hospital is available, is it used for the disinfection of Clothing, Bedding, &c., of Patients not removed to the Hospital?—No.
- If not, please state how disinfection of Clothing, &c., in these cases is carried out—By removal to Council's Disinfecting Apparatus.
- Are any Diseases not specifically mentioned in the Infectious Diseases Notification Act notifiable (for instance, Measles, Whooping Cough, Diarrhæa, Chicken Pox)? If so, what are they?—All diseases specified in the Act.
- Diseases specially prevalent?—Scarlet Fever in a mild form, and Diphtheria. Period?—Throughout the year.
- Number of times School Closure adopted?—One. For what disease?—Measles.
- Number of Special Reports made under Art. XIX. (15 and 16) Sanitary Officers' Order, 1910?—None.
- Bacteriological Examinations. Number and nature of specimens examined?—For Diphtheria, "Swabs," for the purpose of detecting "Carriers."
- Arrangement (if any) made under the Diphtheria Anti-toxin Order 1910?—The provision of Anti-toxin for poor people.

Summary of Medical Officer's Report for 1915—Contd.

- your Authority determined the procedure to be adopted for the inspection of your District as required by Article I of the Regulations?—Yes. Has your Authority prepared, as required by Article I (3), a list of dwelling-houses, the early inspection of which is desirable?—No. Has your Authority designated an officer to undertake the special inspection of houses and to keep the records stipulated by Article 2. If so, what officer?—M.O.H. and Inspector of Nuisances. Have the necessary books, etc., for keeping the required records been obtained?—Yes.
- Action taken in 1915—Number of Dwelling-houses inspected under Sec. 17 of the Act of 1909?—Two. Number of Dwelling-houses considered unfit for human habitation?—Two. Number of Representations to Authority with a view to mal ing Closing Orders?—Two. Number of Closing Orders made?—One by agreement. Number of Dwelling-houses in which defects were remedied without making Closing Orders?—One. Number of Dwelling-houses put into a fit state of habitation after making Closing Orders?—None. Number of Dwelling-houses demolished?—None. General character of defects found to evist?—Drainage Defects, Water Supplies, W.C. Amendments, Dampness, and Defective Ventilation.
- Is there a deficiency of housing accommodation? If so, where?—
  No
- Number of New Houses built during 1915—By and at the cost of the District Council?—None. By private enterprise?—37.
- Source of the Water Supply?—Liverpool Corporation Waterworks. What is its condition?—Very good. Possibilities of contamination?—Nil. Any insufficiency, and where?—No.
- Is Scavenging and Removal of House Refuse carried out satisfactorily?—Yes. How performed (by Sanitary Authority, Contract, or Occupiers of Houses)?—By Council's own Staff.
- How is the Refuse disposed of?—On low-lying land, and covered with soil.

- summary of Medical Officer's Report for 1915-Contd.
- Has a Destructor been provided?—Not up to the present time.
- Sewage Disposal Works. Method of Treatment?—None.
  - What is the character of the Drainage System ?—Water Carriage. Gravitation to the Sea.
  - Areas, or Townships, without proper drainage system?—Small areas not yet provided with sewers.
  - Drain Testing, Flushing, etc.?—Both Drain Testing and Sewer Flushing are carried out constantly.
- Action taken with regard to the Pollution of Streams?—The Cleansing and Bottoming of Water Courses and Ditches throughour the District.
- Canal Boats: Number Inspected?—None.
- What is the condition of the Bakehouses?—Good, receiving regular attention.
- What is the condition of the Slaughter Houses?--None.
- What is the condition of the Lodging Houses?—None. Are they Registered?—No.
- What is the Sanitary condition of the Schools?—Good
- Dairies, Cowsheds, and Milkshops. Are they periodically inspected? - Yes. What is their condition? - Very Good.
  - Have Regulations been made under the Order of the L.G.B.?— Yes. Are they enforced?—In all cases.
  - Amount of air space in cubic feet required for each cow?—600 cubic feet per cow in cases where the cattle are grazed, and 800 cubic feet where the cattle are stall kept and all new premises.
  - Number of Cowkeepers? Number on Register?—Twenty. Number of inspections during year?—Sixty.
  - Number of Dairymen or Purveyors of Milk (other than Cowkeepers)? Number on Register?—None.
  - Any arrangements for veterinary inspection of dairy cows?—Yes, if necessary.
  - Action taken (if any) as to tuberculous milk?—None. No reason for any action.

## Summary of Medical Officer's Report for 1915-Contd.

- Inspection of Food. Number of Carcases and parts of Carcases condemned for tuberculosis?—None.
  - Amount of Food, other than the above, condemned as unfit for human consumption?—None.
  - Number of Legal Proceedings, and result?—None.
- Department of Inspector of Nuisances. Number of Notices served?

  —122. Nuisances remedied?—In all cases. Number of Legal Proceedings taken and result?—One, Magistrate's Order with costs.
- Closet accommodation of the District. Number of Privy Middens?—
  21 Single. Pail Closets?—Five. Fresh Water Closets?—5032.
  Waste Water Closets?—None. Number of Privy Middens converted during 1915?—To W.C.'s—Eleven. To Pails, etc.—
  None. Number of Pail Closets converted to W.C.'s?—None.
  Number of Waste Water Closets converted to W.C.'s?—None.
  Does Council contribute towards the cost of conversion?—When necessary. If so, how much?—By agreement. What kind of closet accommodation is being provided for new property?—
  Chiefly "Liverpool Hopper" pattern, and pedestal basins.
- Smoke. Number of Observations?—Many. Number of Legal Proceedings taken and result?—None. What is the time limit allowed for the emission of black smoke per hour?—No time limit.
- Has the Authority adopted—
  - "The Infectious Disease (Prevention) Act, 1890"?—Yes.
  - "The Public Health Acts Amendment Act, 1890"?—Yes.
  - "The Public Health Acts Amendment Act, 1907"?—Yes
- Has a Health Visitor been appointed?—No.
- Has any, and if so, what action been taken respecting Child Welfare Work?—No action so far.
- Notable Sanitary Improvements during 1915—Amendment of House Drainage. Also reconstruction in some cases.
- Chief Sanitary requirements of District—.1 Refuse Destructor.

## Factories, Workshops, Laundries, Workplaces and Homework.

## 1.—Inspection.

Including Inspections made by Sanitary Inspectors, or Inspectors of Nuisances.

	Number of						
Premises.	Inspections.	Written Notices.					
Factories (including Factory Laundries)	13						
Workshops (Including Workshop Laundries)	8						
Workplaces (Other than Outworkers' premises included in Part 3 of this Report.)	33	3					
Total	54	3					

## 2.—Defects Found.

Particulars				Number o	f Defects.
Particulars.				Found.	Remedied.
Nuisances under the Public Health Act:—					
Want of cleanliness	٠.	• •		2	2
Want of ventilation		• •	• •		
Want of drainage of floors (defective Y	ard pa	av <b>e</b> mei	nt)	I	I
Other Nuisances	• •	•		I	I
Sanitary Accommodation insufficient	• •			I	I
Т	`otal	• ,		5	5

## 3.—Home Work.

Lists received from neighbouring Authority, twice in the year—Outworkers, Women—Two.

## 4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year.										Number.
Important classe enumer	y be									
Factories	٠.	• •	• •	• •	• •	• •	• •	• •		13
Workshops	a +-	• •	• •	• •	• •	• •	• •	• •		24
Workplaces, in	ncludin	g Laui	ndries .	and Ba	akehou	ises	• •	• •	• •	31
		Tota	l numb	per of v	worksh	ops on	Regist	ter	• •	68

## 5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspectors of Factories	None
Failure to affix Abstract of the Factory and Workshops Act (s. 133)	3
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and	2
Workshop Act (s. 5, 1901.) Reports (of action taken) sent to H.M. Inspector	I
Other	None
Underground Bakehouses (s. 101):—	2
Certificates granted during the year	None
In use at the end of the year	2

## Bye-Laws

In force in the District are:

Bye-laws as to New Streets and Buildings.

Bye-laws as to Houses Let in Lodgings.

Bye-laws as to Lodging Houses.

Bye-laws as to Dairies, Cowsheds and Milk Shops Order, 1885.

Infectious Disease (Prevention) Act, 1890.

Factory and Workshops Act; Bakehouse Regulations.

Amended Regulations of Dairies, Cowsheds and Milk Shops Order, 1885, came into force June 1st, 1908.

Public Health Acts Amendment Act, 1907. This Council applied for an order putting into force Clause 58 of the above Act.

Public Health Acts Amendment Act, 1907. Notices under Part V. were circulated amongst Lodging House Keepers.

December 3rd, 1907.

Public Health Acts Amendment Act, 1907, Section 85 and 86.
Regulations re Servants' Registry Offices and Marine Store
Dealers.

Bye-laws in respect to Parks and Recreation Grounds, 1907.

Public Health (Tuberculosis) Regulations, 1908.

Notification of "Ophthalmia Neonatorum" (Compulsory),

June 11th, 1910.

Housing, Towns Planning, etc., Act, Dec. 3rd, 1909.

Bye-laws in respect to Sea Shore, 1911.

Public Health (Tuberculosis) Regulations, 1911, & Feb. 1st 1913. Notification of Births Acts, 1907 and 1915.

I am, Mr. Chairman and Gentlemen,

Your obedient servant,

JAMES HUSKIE,

Medical Officer of Health,

# SANITARY INSPECTOR'S REPORT.

1915.

#### Disinfection.

Particulars of and the number of rooms fumigated with sulphur after infectious diseases, etc., and stoves used to disinfect bedding, etc.

## NUMBER OF ROOMS FUMIGATED, AND FOR WHAT PURPOSE.

Chicken Pox	Scarlet Fever.	Typhoid Fever.	Measles	Diphtheria	Puerperal Fever, Cancer, Pneumonia	Cleansing.	Tuber- culosis	Erysipelas	Total ' Rooms.
I	183	6	. 8	25	5	225	30	I	484

#### NUMBER OF TIMES STOVE USED, AND FOR WHAT PURPOSE.

Chicken Fox	Scarlet Fever.	Typhoid Fever.	Measles	Diphtheria	Cancer.	Cleansing.	Tuber- culosis	Erysipelas	Total Stove used
_	87	6	7	18	2	43	17	2	182

The following list comprises the articles subjected to the "Dry Heat" process for which the stoves have been used:—

Beds and Mattresse	S						 252
Blankets, Sheets, C	Counterpa	ines,	&c.	• •	• •	• •	 693
Pieces of Bedding,							
Wearing Apparel							
Carpets, Rug;, &c.	• •		• •	• •	• •		 490

Total No. of Pieces 2566

This quantity includes material disinfected for the Military Authorities, of which the following is the detail:—

	Windy I	Knowe	Ramleh		L.C.U.D.C. Sniggery Camp
Beds Mattresses \	* * *	25	7	16	2
Blankets, Sheets, Cour panes, &c		07	. 110	96	130
Pieces of Bedding, Pille Bolsters, &c	ows,	80	73	48	43
Wearing Apparel	1	48	II	11	6
Carpets, Rugs, &c.		50 —	5	].	
	4	10	206	I 72	190
	Tot	al 078	nieces.		

The following Schools were fumigated during the year, in Summer and Winter Holidays:

SS. Peter and Paul's Schools	(twice)		• • •	8	rooms	<del></del> 16
St. Luke's (Boys') School (tw	vice)	• • •	• • •	3		12
Halsall (Girls') School (once)	* 9 =	• • •	• • •	6		6
Council School (twice)		• • •	• • •	18	*	36
	T-4-1 -		•			
	Total r	ooms	• • •		~~~	70

In addition, books from the Carnegie Library have been disinfected, as collected from infected houses or required by the Librarian, Miss L. Bartlett.

#### Mortuaries.

The Mortuary on the shore has not been used during the year; but the one at the Council's Depot has been used four times.

### Sanitary Improvements

#### NOTICES SERVED.

Under Section	62 P.H.A., 1875	• • •	• • •	I
7,5	91 P.H.A., 1875, "Abatement of Nuisance"	• • •		8 r
<b>5</b> *	120 ,, "Cleansing after Infectious Disease	2.2	• • •	34
, ,	75 l'.I.C.A., 1847, "Dangerous Buildings, &c."	• • •		3
* 9	F.&W.A., 1901, "Whitewash F.&W."	• • •		I
<b>9</b> *	Dairies, Cowsheds, and Milkshops Order, 1885		• • •	
, ,	Smoke Abatement		• •	2
	Total	• •	• •	122

Also eight letter notices not included in the foregoing list, as well as 205 letters relating to defects, nuisances, etc.; also verbal notices given as to the cleansing of cowsheds, removal of manure, etc., etc., and entailing some 1,521 Sanitary Amendments being made.

Inspections, re-inspections and interviews made in respect to Abatement of Nuisances, etc., 821.

In carrying out the works of Amendment in all cases of default, the Council instructed their Solicitor and Clerk, Mr. Josiah Dean, to write and urge the completion of the work required prior to proceedings being taken to enforce the same. In one case only was it necessary to take proceedings to compel repairs to a damp house, when an "Order with costs' was granted by the Magistrates.

## Ditches and Watercourses.

In February and August printed notices were posted throughout the district as usual, directing all occupiers and owners of land, premises, etc., abutting on Ditches and Watercourses, to bottom and cleanse the same.

### Smoke Test Applied to Drains.

During the year II9 tests (33 old drains, 86 new drains, and retests) have been applied to house drains after infectious cases, to defective drains, and to the drains of new houses before occupation

Thirty-two of the foregoing tests were instituted in response to applications made either by the tenant or the owner of houses.

The Council make the nominal charge of 5/- for each test, when requested, and a certificate of the condition as disclosed is issued. From this source the amount of £8 has been received towards labour and material for such work.

#### Smoke Observations.

Smoke observations were made at various periods, resulting in two notices being served. Proceedings were not necessary, as one resulted in abatement, and in the other smoke-preventing plant was introduced.

This District has no time limit.

#### Infectious Disease.

The drains of houses where infectious disease occur are treated with disinfectants during the time the patient is ill and until convalescent, which entailed 230 visits; and such premises have the drains flushed and tested at Council's cost.

## Garden Refuse.

Garden refuse is still "dumped" on vacant lands, to the annoyance (at least) of residents.

#### Manure.

An manure is requested to be regularly removed, and where necessary pressure is brought to bear on the delinquents.

## Registration of Domestic Servants.

All known Registry Offices for Domestic Servants are visited and receive special attention.

#### Rodents.

The destruction of rats has received attention at different times during the year, but scarcity of labour has prevented me from giving as much time to this work as in previous years.

## Petroleum Spirit and Carbide of Calcium.

Six Licenses for the sale and keeping of Petroleum Spirit and two for Carbide of Calcium were issued during the year. Notices were written to all persons selling Petroleum Spirit and Carbide of Calcium calling attention to the necessity of being Licensed.

Special Reports, Annual Returns, Statistics, Quarterly and Weekly Returns, also daily returns of Births, etc., have been duly submitted as required by the Regulations.

Many visits, surveys, and suggested amendments have been made in regard to the sanitary condition of the billets in the occupation of H.M. Troops.

Notices and advertisements were posted, also forms and literature supplied to all medical practitioners and midwives practising in this District re the Compulsory Notification of Births, which came into force on Sept. 1st, 1915; also in regard to the Compulsory Notification of Measles, which came into force January 1st, 1916.

A census was taken of the District for the purpose of revising the estimated population on the basis of 1911 census, allowance being made for the outgoing and incoming of H.M. Troops.

Correspondence, interviews, accounts, returns, etc., and matters relating to the Abatement of Nuisances; also suggestions as to the

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# RAINFALL AT BLUNDELLSANDS

FOR THE PAST 40 YEARS, 1876 to 1916 (INCLUSIVE).

							,			•			
Year.	Jan	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Inches per Year
,	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	
1876	.99	2.84		2.84		1.99	2.29	3.03	4.14		5.21	4.66	33.25
1877	5.00	3.02	2.19	2.04	•54	1.50	5.48			2 53 3.27	6.25	3.79	43.14
1878	3.09		2.30	1.48	2.97	2.15	.81	4.32	3.24	-	2.27	2.I3	28.95
1879	1.58	1.33 2.58	1.62		3.33 2.01	_		4.23	3.77	2.74 1.48	1.11	1.97	31.22
1880	.82		1.23	2.49		4.34	3.41 4.87	5.77 1.58	3.25		4.01	5.63	35.84
1881	.68	2.53	2.31	1.20	2.32	2.74			3.33	4.50	2.63	2.96	31.46
1882	2.43	3.95	2.69	1.59	3.I4 1.26	3.03 3.16	2.50 = 28	4.04	1.50	2.75 2.64	4.81	3.81	35.89
1883	3.29	I.54 I.80	2.37	3.01	.67	_	5.38	3.04	2.44 4:82	•	2.68	1.64	29.54
1884	3.29		1.20	·94 1.11	_	2.33	2.97	2.20		5.00 1.66	1.82	3.06	26.75
1885		2.25	2.37		1.31	.71 1.62	4.4I	2.40	2.29	6.06	]	_	31.06
1886	1.55 3.65	2.90 1.28	2.21	2.09	1.49		1.57	2.19	4.27		3.20	1.91 4.82	36.11
1887	2.56	.64	1.79	1.78	4.87	1.33	4.59	1.58	3.41	3.99	3.02	2.22	23.31
1888			1.59		2.43	1.34	1.17	2.44	3.70	3.07	1.53		25.99
1889	1.39	.76 2.18	2.46	1.22	.52 2.61	1.92	5.09 2.60	3.37	.92	2.05	4.79	1.50	28.65
1890	.75		2.07	3.11		.70		3.80	2.23	3.02	2.17 6.08	3.41	29.14
	3.70	.73	I.97	1.03	I.98	2.36	2.27	4.12	1.89	2.28		•73	37.29
1891	1.46	.15	I.22	2.31	1.83	4.18	2.88	7.39	4.16	2.68	3.88	5.15	
1892	3.17	1.97	1.25	1.46	2.86	2.92	2.10	3.40	2.62	6.38	2.49	1.90	32.52
1893	1.09	3.13	.38	.29	1.47	1.36	3.29	2.16	3.44	2.77	1.33	3.48	24.19
1894	1.94	3.32	1.55	I.72	2.02	2.09	2.33	3.30	.84	3.43	2.52	2.64	27.70
1895	2.68	.31	2.36	1.60	.62	•79	3.67	2.90	1.12	5.61	2.48	2.29	26.43
1896	1.03	1.14	3.36	I.22	.27	2.75	2.59	2.05	4.29	4.32	1.65	4.08	28.75
1897	1.00	2.20	2.45	2.53	1.32	4.12	1.00	4.25	3.61	1.56	4.34	2.99	31.37
1898	2.03	1.78	.62	1.73	3.73	1.97	.35	4.18	1.33	2.64	2.97	1.86	25.19
1899	3.48	1.37	1.78	2.48	1.96	1.71	1.71	1.03	3.64	2.47	1.25	3.17	26.05
1900	4.20	2.97	1.07	1.13	1.75	2.52	· <b>7</b> 9	6.90	.80	3.29	3.69	3.01	32.12
1901	2.19	1.43	1.38	1.28	.93	1.49	1.43	2.56	.94	2.87	3.35	3.31	23.16
1902	1.61	1.81	1.75	1.49	3.23	1.85	2.05	1.79	.72	2.85	1.62	2.05	22.82
1903	2.12	2.05	3.30	1.72	2.59	2.19	1.96	3.71	4.41	6.88	2.90	1.58	35.41
1904	2.19	4.25	1.60	I.I2	1.85	1.20	.96	2.95	2.66	1.96	1.70	2.85	25.29
1905	1.16	1.09	2.87	1.96	.28	1.54	1.94	2.71	1.45	2.76	3.91	.38	22.05
1906	4.31	2.15	2.13	.79	2.52	1.53	.96	2.97	1.38	4.90	1.94	2.89	28.47
1907	1.02	1.38	1.90	.95	2.82	4.98	2.14	2.99	.59	3.99	2.68	2.47	27.91
1908	1.91	2.47	2.68	2.65	2.48	2.04	3.70	3.22	3.18	1.96	2.50	2.04	30.83
1909	1.90	.85	2.41	2.53	1.03	2.87	4.26	2.96	2.52	3.99	1.26	5.81	32.39
1910	2.89	2.55	.64	2.29	2.31	4.13	3.54	3.26	-37	3.47	4.89	2.61	32.95
1911	.70	1.88	1.08	1.81	.82	2.62	.42	2.98	4.77	2.55	2.1.1	3.72	25.46
1912	3.93	1.23	4.02	.17	1.74	2.76	4.19	5.58	.98	3.91	2.18	1.97	32.66
1913	3•47	0.81	2.89	2.78	2.24	2.05	2.41	2.00	2.26	2.21	3.13	2.32	28.58
1914	1.47	1.45	2.83	.58	1.97	1.55	4.46	1.72	3.64	2.09	3.01	5.16	29.94
1915	4.20	2.55	1.10	1.57	1.01	1.00	2.97	3.84	0.64	1.84	1.96	5.47	28.15
Monthly av.													
for 40 years	2.29	1.91	1.97	1.66	1.92	2.23	2.68	3.27	2.53	3.26	2.93	2.98	29.63
					)-	3	_,,,,,	37		30	)3	, , , ,	

checking of infectious disease; together with matters in the interest of the public health not included in the foregoing tables, etc., have received due and careful attention.

## RAINFALL, 1915.

The Annual and Monthly Rainfalls and Temperature, for the year 1915, as recorded at the Alexandra Park, Great Crosby, are set out in the following tables:—

The gauge used is a 5-inch Snowdon pattern, fixed I foot above ground, at a height of 33.8I feet above Ordnance Datum, in latitude 52° 29″ N. and 3° 2″ West.

Month.	Total Depth. Inches.	Greatest Fall in 24 Hours.	Inches	No. of Days on which .o1 ins. or more were recorded.	No. of	Days Dry.
January February March April May June July August September. October November December Total	2.55 1.10 1.57 1.01 1.00 2.97 3.84 0.64 1.84 1.96 5 47 28.15	January 6 Febry. 2 March 2 April 3 May 1 June 25 July 26 August 16 Sept 24 October23 Nov. 2 Dec. 4	.85 .38 .24 .28 .29 .52 .67 .62 .30 .59 .57	17 21 12 14 10 9 10 17 6 11 13 25 165 days	9 5 5 5 4 1 3 4 10 6 4 - 59 - 51	5 2 14 11 17 20 18 11 20 10 11 2 141 ==============================

The average for the past 40 years being 29.69 inches. Therefore, the past year is 1.54 ins. below the average. The wettest day was January 6th, with .85 ins. March, April, May, June and September were the driest months, with January and December the wettest.

A drought occurred from June 7th to the 21st inclusive, and September had also eleven days' "dry spell," then a wet day, the 14th, .06 ins., followed by a further six days dry.

The above record being kept in accordance with the rules of the British Rainfall Organization.

## Temperature, 1915.

The temperature, read daily at 9 a.m., is recorded in a "Stevenson screen, with maximum and bifurcated minimum thermometers" fixed 4 ft. 6 ins. above grass ground level.

#### MEAN TEMPERATURE.

				1915.		1914.		1913.	
January	• • •	• • •	• • •	_	Degrees	39.53	Degrees	39.23	Degrees
February	• • •	• • •		40.03	"	45.24	a	41.42	"
March	• • •	• • •	• • •	41.19	*	43.88	R	43.19	"
April	• • •	• • •	• • •	46.99	"	49.76	4	46.67	44
May	• • •	• • •	• • •	51.56	"	51.04	"	52.16	
June	• • •	• • •	• • •	58.13	ü	58.22	"	57.51	"
July	• • •	• • •	• • •	59.12	"	61.44	"	59.16	"
August		• • •	• • •	59.33	н	61.41	H	59.95	"
September	r		• • •	57.16	"	57.22	"	57.58	a
October	• • •	• • •	• • •	48.11	//	51.43	"	52.12	"
November		• • •		37.49	H	45.13	e e	47.97	"
December	• • •	• • •	• • •	41.02	"	40.54	H	42.91	
Mean A	verage	for year	ar	48.3	Degrees	50.4	Degrees	50.0	Degrees
					=				

The highest maximum temperature registered was 76 degrees on May 25th. The lowest minimum, Nov. 17th, viz., 22 degrees.

There is nothing to particularise in the year's record, only the absence of continued extreme heat or cold.

It may be noted that the past year has been colder in the mean than the previous two years; though one degree warmer than registered at Southport, viz., 47.3 degrees.

I have the honour to remain,
Mr. Chairman and Gentlemen,

Your obedient servant,

SAMUEL WILSON, M.San.I.Ass'n, M.R.I.P.H.

Inspector of Nuisances, etc.

January, 1916.



